

Serial No. 09/701,132  
Attorney Docket No. 6433/80968

REMARKS

Continued prosecution and reconsideration of the claimed subject matter in the above-identified patent application is respectfully requested.

Claims 1-31, 33, 36, 39, 43, 44, 45, 50, 51, 52, 53, 54, 55, 62, 64, and 65 were cancelled previously. Claims 32, 34, 37, 48, 60, 61 and 67 have been amended herein. Claims 32, 34, 35, 37, 38, 40, 41, 42, 46, 47, 48, 49, 56, 57, 58, 59, 60, 61, 63, 66, 67, 68 and 69 are present in the case and are before the Examiner.

I. The Amendments

The claims have been amended along the lines helpfully suggested by the Examiner to maintain the claimed subject matter within the bounds of the restriction. The length of the molecule has been added to claims 32 and 34. Claim 37 has been amended to more specifically recite a useful primer as being an isolated and purified nucleic acid molecule. Claims 48, 60 and 61 have been amended to recite SEQ ID No 56, rather than 2. It is thus seen that no new matter has been presented through the requested amendments.

II. The Rejections

A. Rejections under 35 U.S.C. § 112,  
1<sup>st</sup> Paragraph

The pending claims were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to provide

enablement for any nucleic acid comprising SEQ ID NO: 13, 56, or 57. The Action noted that the specification was enabling for the nucleic acids of SEQ ID NOs: 1-68 and for primers having lengths of 10 to 20 bases. Although it cannot be agreed that there was a lack of enablement here, it is believed that the present clarifying amendments obviate this basis for rejection.

It is also believed that the newly amended claims obviate the basis for rejection based on the use of "consisting essentially of".

It is respectfully requested that the rejection of the claims under 35 U.S.C. § 112, first paragraph, be withdrawn.

B. Rejections under 35 U.S.C. § 112,  
2<sup>nd</sup> Paragraph

Claim 48 was said to be indefinite for its recitation of SEQ ID NO: 2 and its lack of a period. Claims 60 and 61 were also said to be indefinite for the recitation of SEQ ID NO: 2. It is believed that those bases for rejection are moot in view of the present amendments.

Claim 59 was said to be indefinite because it was unclear "whether the nucleic acid molecule consists of or comprises the nucleic acid of claim 32 or consists of or comprises the nucleic acid molecule of SEQ ID NO: 57". It is believed that the present amendments clarify this issue.

Claim 61 was said to be indefinite because of its further limitation of the recited sequences. The Action recites a single sequence "of step a", whereas a sequence of claim 32 and SEQ ID NO: 57 are recited. This basis for rejection is

therefore not understood, and it is requested that it be more fully explained if it is repeated.

Claim 67 was said to be indefinite over its recitation of "one or more nucleic acid molecules comprising the nucleotide sequence of SEQ ID NO: 57". It is believed that the present amendment overcomes this basis for rejection.

In view of the present amendments discussion above, it is respectfully requested that this ground for rejection of the pending claims under 35 U.S.C. § 112, second paragraph, be withdrawn.

C. Rejection under 35 U.S.C. § 102(e)

Claims 37-38 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Mirzabekov US Patent No. 6,090,549 that is said to teach chips containing all possible 8-mer nucleic acids. The Action noted that the claims did not recite that the primers were isolated and purified, so the disclosure in the patent was said to anticipate the claims. It is believed this rejection is moot in view of the present amendments to claim 37.

The teaching was said to be at paragraph 99, but counsel could not find that numbered paragraph in either the PTO web site version nor a version down-loaded through the NERAC information service. What counsel did find was as statement

The invented method obviates the need for the fabrication and array placement of large numbers of immobilized oligomers. Instead, the invented protocol involves the manufacture of microchips that contain a selection of specific synthetic oligomers, having a length of between approximately 6 and 16 bases, that

are immobilized on a gel. Instead of the 65,536 immobilized octamers needed to detect every base sequence in an 8-base probe, relatively fewer oligomers, from between approximately a few dozen to a few hundred, that are specific for disease-associated allele sequences, are required, depending on the number of fingerprint mutations previously noted in the aberrant gene responsible for the disease.

It is therefore submitted that the relied-on teaching did not teach all 65,536 octamers. It is further submitted that this broad brush teaching does not anticipate the claimed sequences in a manner similar to the way that the disclosures cited against the applicant in *In re Rushig* 145 USPQ 274,282 (CCPA 1966) did not disclose the compounds there. Thus, there was no small recognizable class with common properties as is needed from an anticipating teaching.

In view of the above comments and present amendment, it is respectfully requested that these grounds for rejection of the pending claims under 35 U.S.C. § 102(b) be withdrawn.

### III. SUMMARY

Claims 1-31, 33, 36, 39, 43, 44, 45, 50, 51, 52, 53, 54, 55, 62, 64, and 65 were cancelled previously. Claims 32, 34, 37, 48, 60, 61 and 67 have been amended herein. Each basis for rejection has been dealt with and overcome or otherwise made moot.

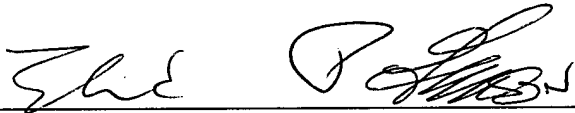
It is therefore believed that this application is in condition for allowance of all of the pending claims. An early notice to that effect is earnestly solicited.

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A Petition for a one month extension of time and its fee are enclosed to permit the Examiner further time to deal with the application. No further fee or petition is believed to be necessary. However, should any further fee or petition be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

The Examiner is requested to phone the undersigned should any questions arise that can be dealt with over the phone to expedite this prosecution.

Respectfully submitted,

By   
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Enclosures  
Petition and Fee

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CERTIFICATE OF MAILING

I hereby certify that this Reply, its enumerated attachments, Petition for Extension of time and its fee are being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on December 22, 2005.

By   
Edward P. Gamson